0009

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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February 26, 2002

Chuck Semborski, Environmental Supervisor
Energy West Mining Company
P.O. Box 310
Huntington, Utah 84528

Re: 9th East Conveyor Pan Section, PacifiCorp, Deer Creek Mine, C/015/018-AB01F-1, Outgoing File

Dear Mr. Semborski:

The above-referenced amendment has been reviewed. There are deficiencies that must be adequately addressed prior to approval. A copy of our Technical Analysis is enclosed for your information. In order for us to continue to process your application, please respond to these deficiencies by.

If you have any questions, please call me at (801) 538-5325 or at Jim Smith at (801) 538-5262.

Sincerely,

Daron R. Haddock
Permit Supervisor

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Enclosure
cc: Price Field Office
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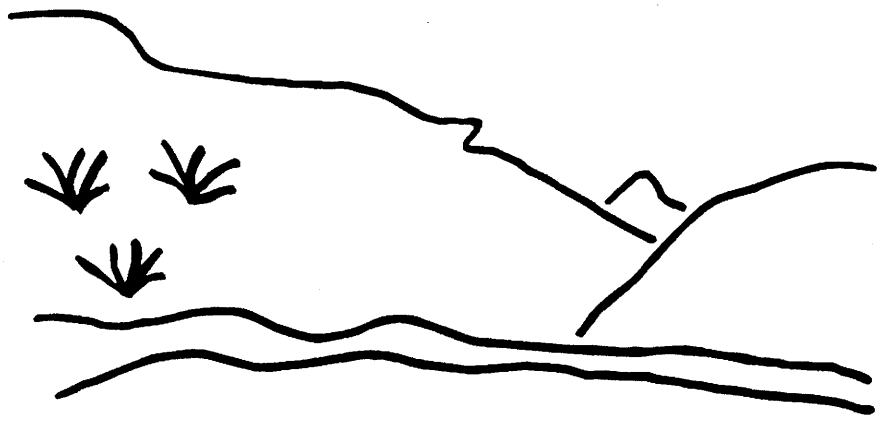
State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Deer Creek Mine
9th East Conveyor Pan Section
C/015/018-AB01F-1
Technical Analysis
February 25, 2002

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TECHNICAL ANALYSIS

INTRODUCTION

On July 16, 2001, Energy West submitted to the BLM a "Lease Term and Condition Modification Request, Removal of Machinery, Federal Lease U-06039." The same day, Energy West notified the Division concerning abandonment of mining equipment in the Deer Creek Mine. The notification included a sketch map identifying the location of the abandoned equipment, a list of the equipment, and a copy of the request to the BLM.

Energy West plans on final coal extraction from 9th East longwall panel by late August or early September 2001. They plan to remove all equipment except for 140 American Longwall (1 m x 1500 mm) conveyor line pans with gob and face side accessories, which consist of toe plates, clevises, cable trays, bretby trays, spill plates and dynatrac castings, conveyor chain, and flight bars. It is planned to leave these in available entry crosscuts of the 9th and 10th East gate roads. No hoses, cables, lubricants, or oils of any kind are to be included in the abandoned equipment. Because of the worn condition of the pans and the low prices for scrap steel, Energy West considers it unreasonable and uneconomical to recover them.

Federal Coal Lease U06039 includes stipulations concerning abandonment of mining equipment underground: Section 10 – Delivery of Premises, Removal of Machinery, Equipment, Etc.; and Section 24 - Waste Certification, which documents abandonment of machinery within the federal coal lease. It is PacifiCorp and Energy West's understanding that the longwall units are not subject to the stipulations of the lease.

On December 5, 2001 (received December 7, 2001), the Permittee submitted a new Volume 2 - Part 3, which modifies the MRP to address actual abandonment of specific mining machinery and materials underground and also future abandonment of such items. It also updates or modifies several other sections of the MRP. This is more than was envisioned when the Division asked the Permittee to submit an amendment to cover the underground equipment issue; however, the necessary information is provided and the other changes do not appear to be substantial or to require extensive review.

Utah Coal Mining Rules require a coal mine operator to demonstrate steps to be taken to minimize disturbance to the hydrologic balance within the permit and adjacent areas and to prevent material damage outside the permit area. The following is a Technical Analysis of probable impacts to the hydrologic balance in the area from the abandonment of this equipment.

INTRODUCTION

SUMMARY OF DEFICIENCIES

The Technical Analysis of the proposed permit changes cannot be completed at this time. Additional information is requested of the permittee to address deficiencies in the proposal. A summary of deficiencies is provided below. Additional comments and concerns may also be found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this review, any deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the Division, result in denial of the proposed permit changes, or may result in other executive or enforcement action as deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

R645-301-536, -731.310, The current Deer Creek Mine MRP contains commitments on page 3-67.1 concerning annual sampling of roof, floor, and mid-seam material, the analyses of these samples for acid- and toxic-forming materials, and the inclusion of the analysis results and maps of the sampling locations in the annual reports. The revised Volume 2, Part 3 does not mention any of this. These commitments need to be restored, or their omission justified..... 15

R645-301-536, The time-of-concentration chart from Barfield in Exhibit D is no longer labeled Exhibit VII, so the identity of this chart needs to be clarified on page 79..... 11

SUMMARY OF DEFICIENCIES

GENERAL CONTENTS

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

Information on the Rilda Canyon Mine facilities on pages 3-90 through 3-94.2 in the current MRP has been moved to pages 33 through 39 in the new Volume 2, Part 3. A copy of the Rilda Canyon Stream Alteration Permit is in Exhibit A, and the Rilda Canyon Stability Analysis by RB&G is in Exhibit B.

Findings:

The new submittal of Volume 2, Part 3 is complete and adequate to meet the Completeness requirements of the Utah Coal Mining Rules.

GENERAL CONTENTS

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Minimum Regulatory Requirements:

The permit application must include as part of the Resource Information, the following maps, plans and cross sections:

Coal resource and geologic information maps

Existing structures and facilities maps

Location and dimensions of existing areas of spoil, waste, coal development waste, and noncoal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area.

Analysis:

Coal Resource and Geologic Information Maps

Drawing R6450301-500G shows sufficient elevation contour information to determine the dip of the coal seam relative to the portals, so that potential for gravity drainage can be evaluated.

Existing Structures and Facilities Maps

Drawing R6450301-500G shows locations of abandoned equipment in the Deer Creek Mine.

Findings:

The proposed amendment meets the minimum requirements of the Maps, Plans, and Cross Sections of Resource Information section of the Coal Mining Rules.

ENVIRONMENTAL RESOURCE INFORMATION

OPERATION PLAN

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Minimum Regulatory Requirements:

Disposal of noncoal mine wastes

Noncoal mine wastes including, but not limited to, grease, lubricants, paints, flammable liquids, garbage, abandoned mining machinery, lumber, and other combustible materials generated during mining activities shall be placed and stored in a controlled manner in a designated portion of the permit area. Placement and storage shall ensure that leachate and surface runoff do not degrade surface or ground water, that fires are prevented, and that the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings.

Final disposal of noncoal mine wastes shall be in a designated disposal site in the permit area or a State-approved solid waste disposal area. Disposal sites in the permit area shall be designed and constructed to ensure that leachate and drainage from the noncoal mine waste area does not degrade surface or underground water. Wastes shall be routinely compacted and covered to prevent combustion and windborne waste. When the disposal is completed, a minimum of 2 feet of soil cover shall be placed over the site, slopes stabilized, and revegetated. Operation of the disposal site shall be conducted in accordance with all local, State, and Federal requirements.

At no time shall any noncoal mine waste be deposited in a refuse pile or impounding structure, nor shall any excavation for a noncoal mine waste disposal site be located within 8 feet of any coal outcrop or coal storage area.

Any noncoal mine waste defined as "hazardous" under Section 3001 of the Resource Conservation and Recovery Act (RCRA) (Pub. L. 94-580, as amended) and 40 CFR Part 261 shall be handled in accordance with the requirements of Subtitle C of RCRA and any implementing regulations.

Coal mine waste

Each plan shall contain descriptions, including appropriate maps and cross-section drawings of the proposed disposal methods and sites for placing underground development waste and excess spoil generated at surface areas affected by surface operations and facilities. Each plan shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the structures.

All coal mine waste shall be placed in new or existing disposal areas within a permit area that are approved by the Division for this purpose. Coal mine waste shall be placed in a controlled manner to:

1.) Minimize adverse effects of leachate and surface-water runoff on surface- and ground-water quality and quantity;
2.) Ensure mass stability and prevent mass movement during and after construction;
3.) Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;
4.) Not create a public hazard; and
5.) Prevent combustion.

Coal mine waste materials from activities located outside a permit area may be disposed of in the permit area only if approved by the Division. Approval shall be based upon a showing that such disposal will be in accordance with the standards of this section.

The disposal facility shall be designed using current, prudent engineering practices and shall meet any design criteria established by the Division. A qualified registered professional engineer, experienced in the design of similar earth and waste structures, shall certify the design of the disposal facility. The disposal facility shall be designed to attain a minimum long-term static safety factor of 1.5. The foundation and abutments must be stable under all conditions of construction. Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of the foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the disposal facility.

If any examination or inspection discloses that a potential hazard exists, the Division shall be informed promptly of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented the Division shall be notified immediately. The Division shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

Analysis:

Disposal of Noncoal Waste

The in-mine abandonment of various types of mining related apparatus has necessitated a change in DOGM policy that now requires that all permittee's submit an amendment to the mining and reclamation plan for the respective mine in which such material is to be abandoned, either temporarily or permanently. This requirement has been established to provide what is felt to be the information necessary for the Division to make a written findings relative to the potential for impact to the hydrologic regime within the associated permit area for the mine.

In preparation of temporary cessation or abandonment of a portion of the mine, mining equipment and extension material to be abandoned in-place or removed will be documented to the BLM and the Division. Appropriate regulatory agencies will be notified prior to abandonment to verify the equipment and material to be left in-place.

The amendment contains lists of equipment and extension material already abandoned, including that described in the "Lease Term and Condition Modification Request, Removal of Machinery" submitted to the BLM on July 26, 2001 (which instigated the submittal of this amendment). The 2000 Annual Report contains some additional details on equipment already abandoned in the mine.

Section R645-731-100 - Hydrologic Balance Protection on page 172 of Volume 9 of the current MRP briefly discusses the permittee's commitment to conduct the underground mining activities in order to minimize potential impacts to surface and ground water resources.

The coal seams in which the Deer Creek Mine was developed dip away from the portals, which are located in small drainages that report to Cottonwood and Huntington Creeks. Any ground water that accumulates in-mine will have a tendency to flow down dip away from the sealed portals located at the outcrop. Therefore, the discharge of mine water from the seals into Cottonwood or Huntington Creek is unlikely. There will be no effect on the surface hydrologic regime.

Coal Mine Waste

Hydrologic Drainage Calculations for the Waste Rock Disposal area are summarized on page 79, where reference is made to Table 6.4 and Exhibit VII: both these are in Exhibit D in the revision of Part 3. The time-of-concentration chart from Barfield is no longer labeled Exhibit VII, so the identity of this chart needs to be clarified on page 79.

Findings:

The proposed amendment does not meet the minimum requirements for Operation Information for Spoil and Waste Materials of the Coal Mining Rules. Prior to approval, the permittee must provide the following in accordance with:

R645-301-536, The time-of-concentration chart from Barfield in Exhibit D is no longer labeled Exhibit VII, so the identity of this chart needs to be clarified on page 79.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Minimum Regulatory Requirements:

General

All underground mining and reclamation activities shall be conducted to minimize disturbance of the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area, and to support approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this part. The Division may require additional preventative, remedial, or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Mining and reclamation practices that minimize water pollution and changes in flow shall be used in preference to water treatment.

Acid- and toxic-forming materials and underground development waste

Drainage from acid- and toxic-forming materials and underground development waste into surface water and ground water shall be avoided by: identifying and burying and/or treating, when necessary, materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated; and, storing materials in a manner that will protect surface water and ground water by preventing erosion, the formation of polluted runoff, and the infiltration of polluted water.

Gravity discharges from underground mines

Surface entries and accesses to underground workings shall be located and managed to prevent or control gravity discharge of water from the mine. The surface entries and accesses of drift mines first used after the implementation of a State, Federal, or Federal Lands Program and located in acid-producing or iron-producing coal seams shall be located in such a manner as to prevent any gravity discharge from the mine. Gravity discharges of water from an underground mine first used before the implementation of a State, Federal, or Federal Lands Program, may be allowed by the Division if it is demonstrated that the untreated or treated discharge complies with the performance standards and any additional NPDES permit requirements.

Water-quality standards and effluent limitations

Compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR Part 434.

Analysis:

General

The Division prepared a Cumulative Hydrologic Impact Assessment (CHIA) for East Mountain, which includes the Deer Creek Mine, in 1994. Abandonment of equipment underground was not covered in that CHIA.

Consequences from abandoned mining machinery and fluids were not included in the Probable Hydrologic Consequences (PHC) determination in the Deer Creek Mine MRP. The PHC identifies water encountered in the mine as "inactive", that is having little communication with the surface and not subject to annual recharge events. The Division cannot currently determine whether or not it is likely that the areas where these pans are to be abandoned will be flooded.

Utah Coal Mining Rules require a coal mine operator to demonstrate steps to be taken to minimize disturbance to the hydrologic balance within the permit and adjacent areas and to prevent material damage outside the permit area.

Acid- and Toxic-Forming Materials

The current Deer Creek Mine MRP contains commitments on page 3-67.1 concerning annual sampling of roof, floor, and mid-seam material, the analyses of these samples for acid- and toxic-forming materials, and the inclusion of the analysis results and maps of the sampling locations in the annual reports. The revised Volume 2, Part 3 does not mention any of this.

Exhibit C contains a summary of the analyses up through 1999. The analysis information and maps could not be found in the 2000 Annual Report.

Gravity Discharges

Drawing R6450301-500G shows sufficient elevation contour information to determine the dip of the coal seam relative to the portals, so that potential for gravity drainage can be evaluated.

The coal seams in which the Deer Creek Mine was developed dip away from the portals, which are located in small drainages that report to Cottonwood and Huntington Creeks. Any ground water that accumulates in-mine will have a tendency to flow down dip away from the portals. Therefore, the discharge of mine water from the portals into Cottonwood or Huntington Creek is unlikely. There will be no effect on the surface hydrologic regime.

Water Quality Standards and Effluent Limitations

The Division prepared a Cumulative Hydrologic Impact Assessment (CHIA) for East Mountain, which includes the Deer Creek Mine, in 1994. Abandonment of equipment underground was not covered in that CHIA.

Consequences from abandoned mining machinery and fluids were not included in the Probable Hydrologic Consequences (PHC) determination in the Deer Creek Mine MRP. The PHC identifies water encountered in the mine as "inactive", that is having little communication with the surface and not subject to annual recharge events. DOGM cannot currently determine whether or not it is likely that the areas where these pans are to be abandoned will be flooded.

- Conditions in abandoned mines in the Wasatch Plateau are not conducive to oxidation or other chemical reactions.

- Recorded pH values for ground waters at the PacifiCorp Mines range from 6.5 to 9.7, but are typically neutral to slightly alkaline.

- With time, oxygen would be absent or at low concentration both in the air and waters of the abandoned mine. Other oxidizing agents would not typically be found in an abandoned mine.

- The cool temperatures in the abandoned mine would tend to retard rather than accelerate most chemical reactions.

Assuming the mine was to flood and the abandoned equipment was to be covered with water, several probable results and impacts can be evaluated.

- Flooding of the abandoned mine might be relatively rapid, but once flooded, flow of ground water into, through, and out-of the void spaces of the mine should be slow.

- If steel or other metals in the equipment were to oxidize, it would be at a very slow rate and the amount of iron and other metals added to the ground water at any one time would be very small.

- Oxides of most metals are insoluble or slightly soluble in water with a neutral pH (anions in solution in the water could increase solubility, but this is not anticipated based on typical ground-water chemistries of the region), especially at temperatures expected in the mine, so once formed, metal oxides would tend to precipitate as solids within the mine rather than flow in solution in the ground water. If any metal were to go into solution, concentrations would be highest near the equipment, but the volume of water in

the flooded mine would dilute concentrations outside the immediate vicinity of the equipment.

- Drawing R6450301-500G shows sufficient elevation contour information to determine the dip of the coal seam relative to the portals so that potential for gravity drainage can be evaluated. Structural dip is to the west or northwest; therefore, movement of water both within the abandoned workings and in the enclosing strata is away from the Deer Creek Mine portals, which are located in small drainages that report to Cottonwood and Huntington Creeks, and discharge of mine water from the portals into Cottonwood or Huntington Creek is unlikely. There will be no effect on the surface hydrologic regime.

- Because of dilution and dispersion, natural seasonal fluctuations, and the limits of accuracy of analytical methods, changes in water quality from the abandonment of this equipment would not be expected to be large enough to be detected at springs, wells, or ground-water base flow to streams.

If the abandoned equipment is not covered with water as the mine floods, metals might oxidize at a faster rate. Even though possibly occurring over a shorter time period, the probable impacts would be negligible to nonexistent because there would be no water to convey potential contaminants to ground or surface waters.

Ferrous metals

Considerable tonnages of ferrous materials, such as steel roof bolts and wire mesh used for roof-support and steel-covered longwall support cans, is routinely abandoned in underground coal mines because the materials cannot be removed without endangering the lives of miners. At the Genwal Crandall Canyon Mine located just north of the PacifiCorp mines, room-and-pillar mining requires approximately 400 tons of steel be placed and abandoned underground to produce each million tons of coal; however, longwall mining, as at Deer Creek, uses steel at a considerably lower rate because less roof is supported. (From 1996 to 1999, production at Deer Creek was on the order of 4 million tons/year.) In comparison to the amount of steel routinely abandoned during underground mining operations, the additional ferrous metal in the shields, conveyors, and pipes is not significant.

Lubricants and Oils

According to the cover letter dated July 16, 2001, no hoses, cables, lubricants, or oils of any kind are to be included in the equipment abandoned in the 9th East submains. However, materials and equipment abandoned in other areas might include or contain these.

Equipment used underground can contain emulsified hydraulic fluid (95 percent water and 5 percent oil), gear oil, ATF or similar fluid, and grease, which could eventually enter the hydrologic system if not removed from the mine. Oxidation of metals will eventually release

small residual amounts of these materials, but even these small releases will be spread over a long time, so the potential for impact to the hydrologic system is either non-existent or negligible. Material Safety Data Sheets (MSDS) for the hydraulic fluid and greases have been included in the 2000 Annual Report.

Polymers, Resins, Plastics and Rubber

According to the cover letter dated July 16, 2001, no hoses or cables of any kind are to be included in the equipment abandoned in the 9th East submains. However, materials abandoned in other areas might include these types of organic-based compounds.

Such materials contain polymers, resins, and other organic compounds that generally have long-term stability, especially when not exposed to ultraviolet light. Products used in the manufacture of these materials often remain in very small, often undetectable, residual amounts. Generally, only small quantities of such materials are left underground; considering this with other factors already discussed, the potential for impact to the hydrologic system from these materials is negligible.

Findings:

The proposed amendment does not meet the minimum requirements of Operation Plan Hydrologic Information of the Coal Mining Rules. Prior to approval, the permittee must provide the following in accordance with:

R645-301-536, -731.310, The current Deer Creek Mine MRP contains commitments on page 3-67.1 concerning annual sampling of roof, floor, and mid-seam material, the analyses of these samples for acid- and toxic-forming materials, and the inclusion of the analysis results and maps of the sampling locations in the annual reports. The revised Volume 2, Part 3 does not mention any of this. These commitments need to be restored, or their omission justified.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Minimum Regulatory Requirements:

Each application shall contain maps, plans, and cross sections which show the mining activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown and described as an existing structure.

The following shall be shown for the proposed permit area:

Mine workings maps

Location and extent of known workings of proposed, active, inactive, or abandoned underground mines, including mine

openings to the surface within the proposed permit and adjacent areas. Location and extent of existing or previously surface-mined areas within the proposed permit area.

Analysis:

Mine Workings Maps

Drawing R645-301-500G, which shows the locations of the abandoned equipment, has been added to the MRP.

Findings:

The proposed amendment meets the minimum requirements of the Maps, Plans, and Cross Sections of Mining Operations section of the Coal Mining Rules.

RECLAMATION PLAN

MINE OPENINGS

Regulatory Reference: 30 CFR 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Minimum Regulatory Requirements:

Each exploration hole, other drillhole or borehole, shaft, well, or other exposed underground opening shall be cased, lined, or otherwise managed as approved by the Division to prevent acid or other toxic drainage from entering ground and surface waters, to minimize disturbance to the prevailing hydrologic balance and to ensure the safety of people, livestock, fish and wildlife, and machinery in the permit area and adjacent area. Each exploration hole, drill hole or borehole or well that is uncovered or exposed by mining activities within the permit area shall be permanently closed, unless approved for water monitoring or otherwise managed in a manner approved by the Division. Use of a drilled hole or monitoring well as a water well must meet the provisions required to protect the hydrologic balance. This section does not apply to holes drilled and used for blasting, in the area affected by surface operations.

Each mine entry which is temporarily inactive, but has a further projected useful service under the approved permit application, shall be protected by barricades or other covering devices, fenced, and posted with signs, to prevent access into the entry and to identify the hazardous nature of the opening. These devices shall be periodically inspected and maintained in good operating condition by the person who conducts the underground mining activities.

Each exploration hole, other drill hole or borehole, shaft, well, and other exposed underground opening which has been identified in the approved permit application for use to return underground development waste, coal processing waste or water to underground workings, or to be used to monitor ground water conditions, shall be temporarily sealed until actual use.

When no longer needed for monitoring or other use approved by the Division upon a finding of no adverse environmental or health and safety effects, or unless approved for transfer as a water well, each shaft, drift, adit, tunnel, exploratory hole, entry way or other opening to the surface from underground shall be capped, sealed, backfilled, or otherwise properly managed, as required by the Division and consistent with the requirements of 30 CFR Section 75.1711. Permanent closure measures shall be designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or other toxic drainage from entering ground or surface waters.

Analysis:

During temporary cessation, all portals will be sealed according to MSHA regulations and as specified in 30CFRPart75.335, or as specified in the approved ventilation plan.

Findings:

The proposed amendment meets the minimum requirements of the Reclamation Plan Mine Openings section of the Coal Mining Rules.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Minimum Regulatory Requirements:

Hydrologic reclamation plan

The application shall include a plan, with maps and descriptions, indicating how the relevant regulatory requirements will be met. The plan shall be specific to the local hydrologic conditions. It shall contain the steps to be taken during mining and reclamation through bond release to minimize disturbance to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; and to meet applicable Federal and State water quality laws and regulations. The plan shall include the measures to be taken to: avoid acid or toxic drainage; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water treatment facilities when needed; and control drainage. The plan shall specifically address any potential adverse hydrologic consequences identified in the PHC determination and shall include preventive and remedial measures.

Each application shall contain descriptions, including maps and cross sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with the performance standards for those structures.

Postmining rehabilitation of sedimentation ponds, diversions, impoundments, and treatment facilities

Before abandoning a permit area or seeking bond release, the operator shall ensure that all temporary structures are removed and reclaimed, and that all permanent sedimentation ponds, diversions, impoundments, and treatment facilities meet the requirements of this Chapter for permanent structures, have been maintained properly and meet the requirements of the approved reclamation plan for permanent structures and impoundments. The operator shall renovate such structures if necessary to meet the requirements of this Chapter and to conform to the approved reclamation plan.

Analysis:

Gravity Discharges

During temporary cessation, all portals will be sealed according to MSHA regulations and as specified in 30CFRPart75.335, or as specified in the approved ventilation plan. Drawing R6450301-500G shows sufficient elevation contour information to determine the dip of the coal seams relative to the portals, so that potential for gravity drainage can be evaluated.

The coal seams in which the Deer Creek Mine was developed dip away from the portals, which are located in small drainages that report to Cottonwood and Huntington Creeks. Any ground water that accumulates in-mine will have a tendency to flow down-dip away from the sealed portals located at the outcrop. Therefore, the discharge of mine water from the seals into Cottonwood or Huntington Creek is unlikely. There will be no effect on the surface hydrologic regime.

Water Quality Standards and Effluent Limitations

The in-mine abandonment of various types of mining related apparatus has necessitated a change in DOGM policy that now requires that all permittee's submit an amendment to the mining and reclamation plan for the respective mine in which such material is to be abandoned, either temporarily or permanently. This requirement has been established to provide what is felt to be the information necessary for the Division to make a written findings relative to the potential for impact to the hydrologic regime within the associated permit area for the mine.

Section R645-731-100 - Hydrologic Balance Protection on page 172 of Volume 9 of the current MRP briefly discusses the permittee's commitment to conduct the underground mining activities in order to minimize potential impacts to surface and ground water resources.

The coal seams in which the Deer Creek Mine was developed dip away from the portals, which are located in small drainages that report to Cottonwood and Huntington Creeks. Any ground water that accumulates in-mine will have a tendency to flow down dip away from the sealed portals located at the outcrop. Therefore, the discharge of mine water from the seals into Cottonwood or Huntington Creek is unlikely. There will be no effect on the surface hydrologic regime.Diversions

Findings:

The proposed amendment meets the minimum requirements of the Reclamation Plan Hydrologic Information section of the Coal Mining Rules.

CESSATION OF OPERATIONS

Regulatory Reference: 30 CFR 817.131, 817.132; R645-301-515, -301-541.

Minimum Regulatory Requirements:

Each person who conducts mining activities shall effectively support and maintain all surface access openings to underground operations, and secure surface facilities in areas in which there are no current operations, but operations are to be resumed under an approved permit. Temporary abandonment shall not relieve a person of his or her obligation to comply with any provisions of the approved permit.

Before temporary cessation of mining and reclamation operations for a period of 30 days or more, or as soon as it is known that a temporary cessation will extend beyond 30 days, each person who conducts underground mining activities shall submit to the Division a notice of intention to cease or abandon operations. This notice shall include a statement of the exact number of surface acres and the horizontal and vertical extent of subsurface strata which have been in the permit area prior to cessation or abandonment, the extent and kind of surface area reclamation which will have been accomplished, and identification of the backfilling, regrading, revegetation, environmental monitoring, underground opening closures, and water-treatment activities that will continue during the temporary cessation.

The person who conducts underground mining activities shall close or backfill or otherwise permanently reclaim all affected areas, in accordance with this Chapter and according to the permit approved by the Division.

All surface equipment, structures, or other facilities not required for continued underground mining activities and monitoring, unless approved as suitable for the postmining land use or environmental monitoring, shall be removed and the affected lands reclaimed.

Analysis:

PacifiCorp will notify the Division of the date of temporary cessation of coal mining. The notice will include a statement of the exact number of surface acres and the horizontal and vertical extent of subsurface strata which have been in the permit area, the reclamation schedule, a description of environmental monitoring. Water conveyance structures are to be maintained as specified in the MRP. All portals will be sealed according to MSHA regulations and as specified

in 30CFRPart75.335, or as specified in the approved ventilation plan. The permittee does not identify or refer to any backfilling, regrading, or revegetation activities that will continue during the temporary cessation.

In preparation of temporary cessation or abandonment of a portion of the mine, mining equipment and extension material to be abandoned in-place or removed will be documented to the BLM and the Division. Appropriate regulatory agencies will be notified prior to abandonment to verify the equipment and material to be left in-place.

The amendment contains lists of equipment and extension material already abandoned, including that described in the "Lease Term and Condition Modification Request, Removal of Machinery" submitted to the BLM on July 26, 2001 (which instigated the submittal of this amendment).

Findings:

The proposed amendment meets the minimum requirements of the Reclamation Plan Cessation of Operations section of the Coal Mining Rules.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Minimum Regulatory Requirements:

Each application shall contain maps, plans, and cross sections which show the reclamation activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown and described as an existing structure.

The permit application must include as part of the reclamation plan information, the following maps, plans and cross sections:

Reclamation surface and subsurface manmade features maps

The location of all buildings in and within 1,000 feet of the proposed permit area, with identification of the current or proposed use of the buildings at the time of final reclamation. The location of surface and subsurface manmade features within, passing through, or passing over the proposed permit area, including, but not limited to, major electric transmission lines, pipelines, fences, and agricultural drainage tile fields. Each public road located in or within 100 feet of the proposed permit area and all roads within the permit area which are to be left as part of the post-mining land use. Buildings, utility corridors, and facilities to be used in conjunction with reclamation or to remain for final reclamation.

Analysis:

Reclamation Surface and Subsurface Manmade Features Maps

Drawing R645-301-500G, which shows the locations of the abandoned equipment, has been added to the MRP.

Findings:

The proposed amendment meets the minimum requirements of the Maps, Plans, And Cross Sections of Mining Reclamation section of the Coal Mining Rules.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR 784.14; R645-301-730.

Minimum Regulatory Requirements:

The Division must provide an assessment of the probable cumulative hydrologic impacts (CHIA) of the proposed operation and all anticipated mining upon surface- and ground-water systems in the cumulative impact area. The CHIA shall be sufficient to determine, for purposes of permit approval, whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The Division may allow the applicant to submit data and analyses relevant to the CHIA with the permit application. An application for a permit revision shall be reviewed by the Division to determine whether a new or updated CHIA shall be required.

The Division prepared a Cumulative Hydrologic Impact Assessment (CHIA) for East Mountain, which includes the Deer Creek Mine, in 1994. The proposed permit revision has been reviewed by the Division, and the Division has determined that the current CHIA is sufficient to determine, for purposes of permit approval, that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area, and will not involve operations outside of the cumulative impact area as defined in the CHIA.

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